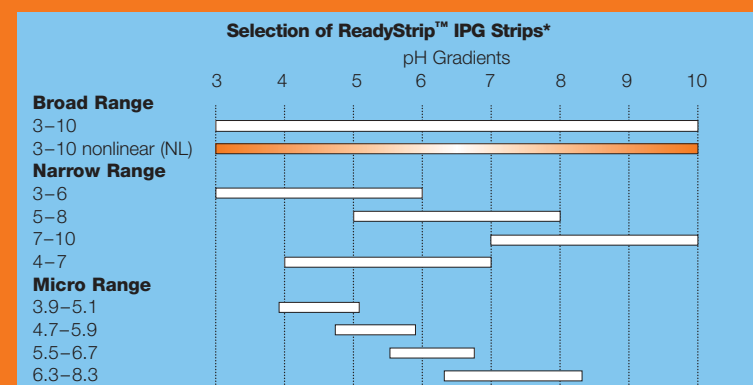


During different phases of 2-D PAGE experiments, requirements for resolution, throughput, and speed vary. For example, when sample preparation conditions are being worked out, speed is more important than resolution or throughput. Resolution is more important for analyzing complicated proteomes, whereas throughput is important when many samples must be run.

Bio-Rad addresses these varying requirements by offering choices in IPG strips, gel sizes, and electrophoresis systems. Mini systems allow speed during the initial phases of experimentation and screening, and large systems provide maximum landscape and loading capacity when resolution is important.



*Available in 7, 11, 17, 18, and 24 cm lengths.

First-Dimension IEF System



PROTEAN® IEF System

Second-Dimension SDS-PAGE Systems



Mini-PROTEAN® 3 Cell

Mini-PROTEAN® 3 Dodeca™ Cell

Criterion™ Cell

Criterion™ Dodeca™ Cell

PROTEAN® II XL Cell

PROTEAN Plus™ Dodeca™ Cell

BIO-RAD

discover.bio-rad.com

Speed and Resolution

The unique extra-wide mini gel of the Criterion system offers the best combination of resolution and speed, revealing more spots than a traditionally sized mini gel without a significant difference in run time.

First Dimension

PROTEAN IEF cell

11 cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

IEF run time: 4-6 hr

Second Dimension

Criterion cell

Criterion precast gels (13.3 x 8.7 cm)

SDS-PAGE run time: 1 hr

Resolution

The PROTEAN II XL system offers a large gel size and easy handling, ideal for high protein loads, complex samples, or an entire proteome. Use micro-range ReadyStrip IPG strips for the ultimate in resolution over a broad pH spectrum. For improved separation of basic proteins on pH 6.3-8.3 and pH 7-10 ReadyStrip IPG strips, use the cup loading tray for the PROTEAN IEF cell.

First Dimension

PROTEAN IEF cell

17, 18, cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

IEF run time: 5-7 hr

Second Dimension

PROTEAN II XL cell

PROTEAN II Ready Gel® precast gels (18.3 x 19.3 cm)

SDS-PAGE run time: 4-6 hr

Resolution and Throughput

For drug discovery, isolating a large quantity of protein, or studying low-abundance proteins where higher protein loads are needed, the PROTEAN Plus Dodeca cell offers the largest gel area and will run up to 12 gels in 6 hours. This flexible system accommodates 17, 18, or 24 cm strip lengths, all of which are available as linear and nonlinear pH gradients, and in narrow and micro ranges.

First Dimension

PROTEAN IEF cell

17, 18, 24 cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

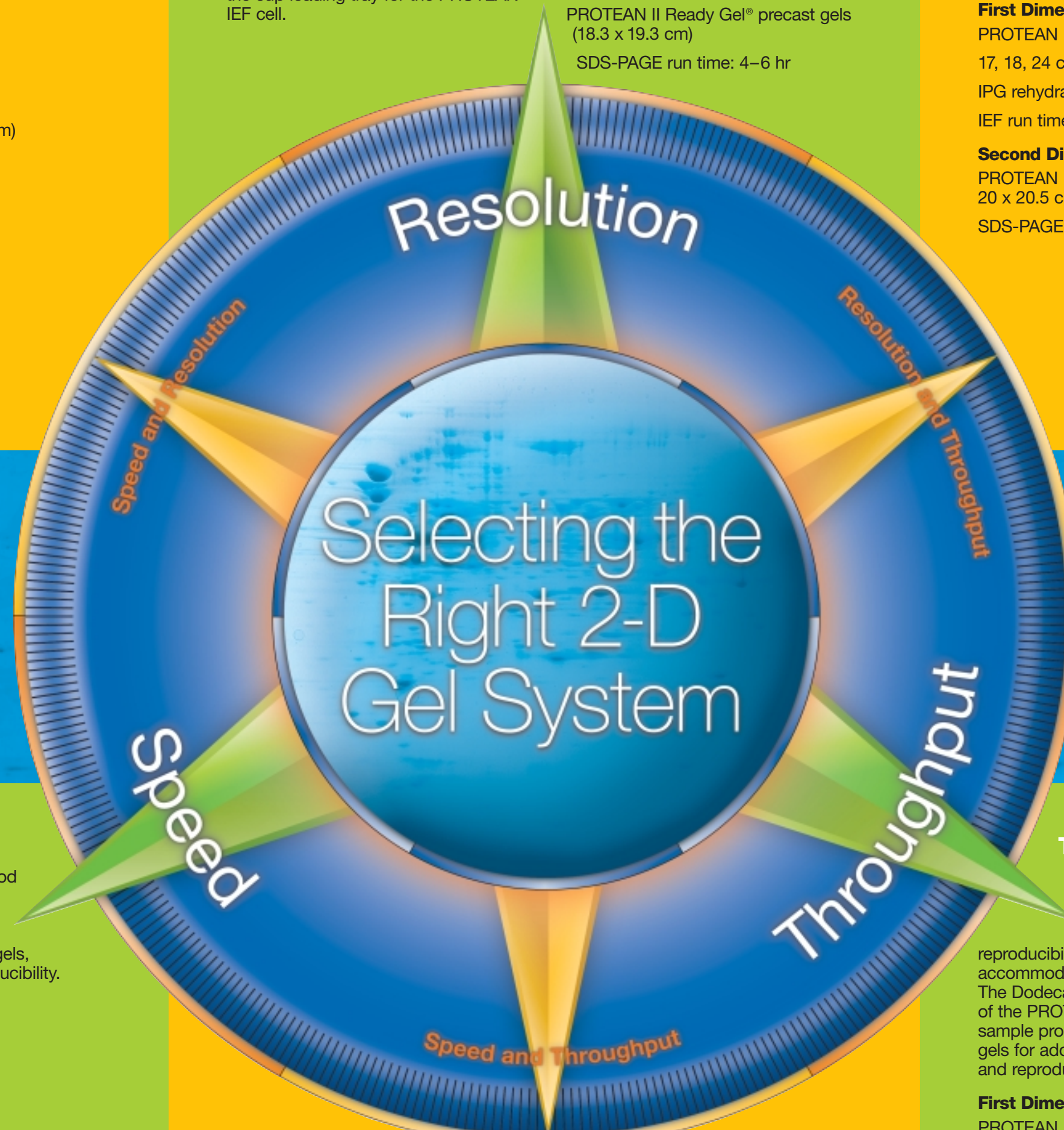
IEF run time: 6-9 hr

Second Dimension

PROTEAN Plus Dodeca cell

20 x 20.5 cm or 25 x 20.5 cm gels

SDS-PAGE run time: 6 hr



Speed

For sample optimization and method development, a mini gel system is the answer. The popular Mini-PROTEAN 3 system, coupled with Ready Gel® precast gels, speeds results and ensures reproducibility.

First Dimension

PROTEAN IEF cell

7 cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

IEF run time: 2-3 hr

Second Dimension

Mini-PROTEAN 3 cell

Ready Gel precast gels (8.3 x 7.3 cm)

SDS-PAGE run time: 45 min

Speed and Throughput

The combination of speed and throughput is best delivered by the Criterion Dodeca cell, which runs up to 12 extra-wide mini Criterion gels simultaneously. Do fast runs to optimize focusing or run conditions, to study sample preparation methods, for repetitive studies, or to map well-characterized proteins or proteomes of less complex organisms, when a large gel format may not be necessary.

First Dimension

PROTEAN IEF cell

11 cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

IEF run time: 4-6 hr

Second Dimension

Criterion Dodeca cell

Criterion precast gels (13.3 x 8.7 cm)

SDS-PAGE run time: 1 hr

Throughput

For analyzing multiple samples, throughput is important. Run up to 12 gels simultaneously for optimal throughput and reproducibility. The three sizes of Dodeca cells accommodate most high-throughput needs. The Dodeca cells match the 12-gel capacity of the PROTEAN IEF cell for streamlined sample processing. Take advantage of precast gels for added convenience, time savings, and reproducibility.

First Dimension

PROTEAN IEF cell

7, 11, 17, 18, 24 cm ReadyStrip IPG strips

IPG rehydration time: 12 hr

IEF run time: 2-9 hr

Second Dimension

PROTEAN Plus Dodeca cell

20 x 20.5 cm or 25 x 20.5 cm gels

Criterion Dodeca cell

Criterion precast gels (13.3 x 8.7 cm)

Mini-PROTEAN 3 Dodeca cell

Ready Gel precast gels (8.3 x 7.3 cm)

SDS-PAGE run time: 1-6 hr